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(54) **Title**: OPTICAL ENDPOINT DETECTION SYSTEM

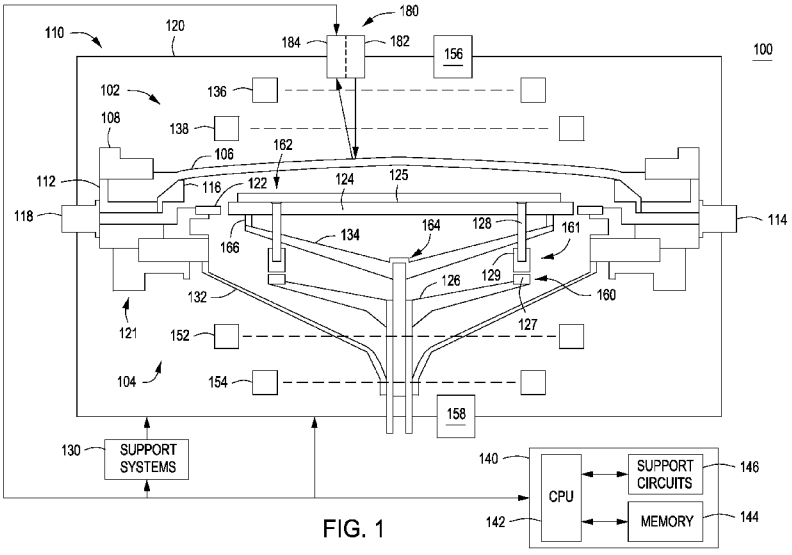


FIG. 1

(57) **Abstract**: Methods and apparatus for determining an endpoint of a process chamber cleaning process are provided. In some embodiments, a processing system having an endpoint detection system may include a process chamber having internal surfaces requiring periodic cleaning due to processes performed in the process chamber; and an endpoint detection system that includes a light detector positioned to detect light reflected off of a first internal surface of the process chamber; and a controller coupled to the light detector and configured to determine an endpoint of a cleaning process based upon the detected reflected light.

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